

Date: Wed, 17 Mar 93 09:03:59 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #334  
To: Info-Hams

Info-Hams Digest                      Wed, 17 Mar 93                      Volume 93 : Issue    334

Today's Topics:

          144 MHz 4CX1000A Amplifier Design Needed  
                                Ham Radio Outlet  
      HP 8553B Spectrum Analyzer RF plugin for sale(Price reduced)  
                                HR-2600 FOR SALE  
                                Info-Hams Digest V93 #328  
                                Long Wire Sag  
      Newbie question: What is iambic? (2 msgs)  
                                QRP power on the TS-850 ?  
                                Question about MODE on QSL cards  
                                Washing Radios?  
      What about those FAQing number stations anyway?  
                                Wrinkle Paint

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
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Date: Wed, 17 Mar 1993 14:48:08 GMT  
From: usc!zaphod.mps.ohio-state.edu!hobbes.physics.uiowa.edu!news.uiowa.edu!  
alchemy.uhl.uiowa.edu!jstroppe@network.UCSD.EDU  
Subject: 144 MHz 4CX1000A Amplifier Design Needed  
To: info-hams@ucsd.edu

M.Willis@ee.surrey.ac.uk (Mike Willis) writes:

:  
: I have acquired a 4CX1000A plus base and chimney and want to make it go on 144  
MHz.  
: I need a good reliable design that is not too hard to build, for the RF bits. I

can

: manage the PSU. I have only seen the ARRL design so far. Alternatives would be  
: welcomed.

:

: Mike

Mike: I built one of these back when and still have it, but never fired it  
up. Will have to look, but I think I used a system from Emaic tubes. If  
you're interested E-mail me and I can look for the info. Might work out some  
deal on the unit, the drive system for the tuning cap broke in a move.

Tried to E-mail direct but message bounced, so posted here.

john WA0VYZ

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Date: Wed, 17 Mar 1993 14:38:49 GMT

From: sdd.hp.com!hpscit.sc.hp.com!hpuerca.atl.hp.com!edh@network.UCSD.EDU

Subject: Ham Radio Outlet

To: info-hams@ucsd.edu

Oh, are we changeing the thread from HRO to AES?

I've bought enough mail (phone) order from AES to remain  
on their mailing list, and have been happy with the service  
and delivery in all cases. I, too, appreciate the printed  
prices, but understand the marketplace enough to accept the  
fact that sometimes prices go up (re-evaluate purchase?)  
and sometimes they go down (a bonus! it's on sale).

Cheers & 73 Ed Humphries N5RCK  
Hewlett-Packard NARC Atlanta GA  
edh@hpuerca.atl.hp.com

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Date: Wed, 17 Mar 1993 15:16:33 GMT

From: usc!wupost!csus.edu!netcom.com!crisp@network.UCSD.EDU

Subject: HP 8553B Spectrum Analyzer RF plugin for sale(Price reduced)

To: info-hams@ucsd.edu

In article <1993Mar15.172231.18732@netcom.com> crisp@netcom.com (Richard Crisp)  
writes:

>I have a later model HP 8553B spectrum analyzer RF unit for sale. It  
>covers 0-11, 0-110MHZ in two ranges. It works perfectly, looks nice  
>and is offered at \$525. It is the beige sort of color. I have a 141T with  
>the 8555A and 8552B and no longer need the 8553B as I have recently  
>obtained a W&G TSA1 which covers the same range (actually a bit more).  
>So there must be someone out there needing this really fine RF unit.

```
--
Richard Crisp                                Cupertino, Ca.                                crisp@netcom.com
(415) 903-3832 wk                            (408) 253 4541 fax
"When I make a joke, no one gets hurt; when Congress makes a joke, it becomes
law"                                           -Will Rogers
```

```

/*****\
*Steve Silverwood, KB6OJS      *Internet:   76703.3035@compuserve.com *
*13582 Taft St.                *GEnie:      S.SILVERWOOD      *
*Garden Grove, CA  92643       *CompuServe: 76703,3035      *
*(714)534-6964                 *Packet:    KB6OJS@WF60.#SOCA.CA.USA.NA *
/*****/

```

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*-----*
| The File Bank BBS - 619-728-4318 - PCBoard v.14.5a/E10 - USR HST & DS |
| 8 nodes / RIME / Internet / Largest Clipper file collection in the world |
*-----*
```

Date: 17 Mar 93 15:28:32 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Info-Hams Digest V93 #328  
To: info-hams@ucsd.edu

>...

>I jest of course; I have fond memories of all my Heathkits,  
>including the HW-101.

>...

>Mike, N4PDY

Oh to be back with my SB101 mounted in my '67 Ford Galaxie 500 convertible with the Hustler antenna hitting the tree limbs. I think about it every time I trip over the mobile power supply and mount in the garage. Took it out so the girls could sit closer, then bought a Jap car where it couldn't possibly fit. Things haven't been the same since.

Still use my SB101 (supposedly up scale from the HW101 though I was never convinced). Only repairs in 25 years have been to replace the rotten rubber belts which gang the tuning and loading controls with big rubber bands. Course two of the ten meter ranges never worked--still don't--I'll have to fix that some day.

Jack, K4FRS

-----  
Date: 17 Mar 93 14:32:32 GMT  
From: usc!howland.reston.ans.net!spool.mu.edu!olivea!sgigate!odin!  
chuck.dallas.sgi.com!adams@network.UCSD.EDU  
Subject: Long Wire Sag  
To: info-hams@ucsd.edu

Gary Coffman, KE4ZV, in previous post gave a formula

$$S=(W*L^2)/(8*H)$$

for the sag in a cable suspended from two points of equal height.

S is the sag in feet

L is the length of span in feet

W is weight of cable (sic)

H is tension in the cable in feet (sic) :this should be pounds

i think that W should be the weight/foot of the wire(cable).

lets rewrite this equation as

$$S=(TW*L)/(8*H) \text{ where TW is total weight of cable.}$$

this formula is a little more easier to monitor what is going on.

if we have a span that is six times longer, but keep the same weight, i.e.

use smaller wire, and keep the same tension, the cable will sag 6 times as

much. children, remember this.....

i wanna do this a little bit differently. let's work with a fixed length cable, say 100 meters. the unit of measurement is not important here, as i will illustrate later. let's make the total weight equal to 1 critter, where a critter is whatever you want it to be, pounds are ok by me. i dug out the old code and did the following calculations for a 100 meter cable or feet if you prefer:

Span	Sag	Tension (at each end) divided by weight
0	50	0.500
50	39.83	0.503
75	29.44	0.563
90	19.07	0.744
95	13.59	0.983
96	12.18	1.083
97	10.56	1.233
98	8.63	1.488
99	6.11	2.075
99.5	4.31	2.917
99.8	2.72	4.614
99.9	1.91	6.568

Gary was kind enuff to send me a table of figures for copperweld and copper wire. i'll just demo with the copper wire. #8 weighs 5.0 pounds per 100 feet.

using the above table, if 100 feet of copper wire is to sag only 1.91 feet, then we would have to pull  $5 \times 6.568$  pounds. Gary gave me the recommended tension of 84 pounds, which i shall interpret to mean that anything above this will either stretch the wire, cause it to break, and/or shorten the lifetime of the antenna. so we are within the limits specified.

for a 600 foot cable, where this all began with a question about a rhombic antenna, multiply the table figures by 6. in the case of 600 feet, a sag of 11.46 feet will result for a tension of  $6 \times 5 \times 6.568 = 30 \times 6.568 = 197.04$  pounds, which is too much. of course, a sag of zero can be obtained by an infinite tension, but separation and lift off will occur before this happens. ;-)

Gary can comment on this, since he's probably destroyed or few or might be willing to do so after this post. i use ceramic insulators about 2" long, and they are almost square looking from the end. i think one of these critters will break before the wire does. don't know for sure. that's why they a set so that the wire will hold if the insulator breaks with the loops interlocked. but you knew this.

oh. the sag is the distance between the lowest point and the horizontal

line between the end points.

ok. use the above table and scale it by length and weight density to get what you need. guess i'll have to do a complete article for QST on this. maybe get it in the ARRL handbook. my program is cable of working with cables suspended at intermediate points by balloon or varying lift factors. guess i could do kites and balloons at the end also.

sorry to use of bandwidth for facts. :-)

thanks to Gary for the data points. i'm not picking on him and i don't think that he's picking on me either. see you at FD Gary. :-)

73 es gl bcnu de k5fo chuck dit dit

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Date: Wed, 17 Mar 1993 13:00:39 GMT

From: usc!wupost!darwin.sura.net!jabba.ess.harris.com!mlb.semi.harris.com!SU19F!jhobson@network.UCSD.EDU

Subject: Newbie question: What is iambic?

To: info-hams@ucsd.edu

In article <C40ECM.8JE@icon.rose.hp.com> greg@core.rose.hp.com (Greg Dolkas) writes:

>So how does one go about learning how to use one of these things? I'd like  
>to play with CW, and would probably benefit in the long run from \*not\* learning  
>on a straight key (and have to unlearn it). Is there a general preference for  
>using a keyer (how many kinds are there?), or do most folks just stick with  
>the original telegraph-style key? OR, is this a question like "what's the  
>best text editor"?

>

>Greg KD6KGW

I used a straight key exclusively for about a year (if I remember correctly; it was a long time ago), going from ~5 WPM to ~18 WPM. At some point I got my first keyer (not iambic). It was a Heathkit with a single paddle which the operator pushes left and right. I kludged a squeeze key using thin wooden "paddles", machine screws for one side of each contact, and rubber bands for tension. Now I have Bencher paddle connected to the internal keyer of my IC-735 (bad choice (the keyer that is), get an external one). I occasionally go back to my original straight key as part of my CW play.

To get to the point, don't worry about having to unlearn the use of a straight key. I use my keyer because I can only send about 15-18 WPM half decent with a straight key.

I like to play with CW, too!

73,  
Harv  
WB4NPL  
jhobson@su19f.ess.harris.com

-----  
Date: 17 Mar 1993 15:09:33 GMT  
From: usc!news.bbn.com!bbn.com!levin@network.UCSD.EDU  
Subject: Newbie question: What is iambic?  
To: info-hams@ucsd.edu

greg@core.rose.hp.com (Greg Dolkas) writes:

|So how does one go about learning how to use one of these things? I'd like  
|to play with CW, and would probably benefit in the long run from \*not\* learning  
|on a straight key (and have to unlearn it). Is there a general preference for  
|using a keyer (how many kinds are there?), or do most folks just stick with  
|the original telegraph-style key? OR, is this a question like "what's the  
|best text editor"?

I'd say there's enough difference between a straight key and a keyer  
that there's nothing to unlearn when switching back and forth.  
Straight keys require more attention to the quality of the dits and  
dahs, so I find after using the keyer I'm likely to be quite sloppy  
with the straight key. The keyer gives you a lot of latitude while  
producing perfectly timed components.

/J

=

Nets: levin@bbn.com | "How does a mouse let me move the cursor anywhere  
pots: (617)873-3463 | I want?" "What are address busses?" "How do  
N1MNF | icons work?" --Time-Life Books

-----  
Date: Wed, 17 Mar 93 12:53:00 GMT  
From: mnemosyne.cs.du.edu!nyx!jman@uunet.uu.net  
Subject: QRP power on the TS-850 ?  
To: info-hams@ucsd.edu

Is there any way to reduce the output power on the TS-850 from the minimum  
of 10W to 5W. I read somewhere else that this might affect the automatic  
ATU ? I suppose I could use an attenuator, but this would affect my  
sensitivity. Any other hints and kinks about this rig would be welcome.  
Please reply by e-mail. Thanks,

John, jhl14@phx.cam.ac.uk

-----  
Date: Wed, 17 Mar 1993 15:24:17 GMT  
From: sdd.hp.com!caen!zaphod.mps.ohio-state.edu!news.acns.nwu.edu!  
casbah.acns.nwu.edu!rdewan@network.UCSD.EDU  
Subject: Question about MODE on QSL cards  
To: info-hams@ucsd.edu

In article <1993Mar17.061702.26843@sequent.com> dale@sequent.com (Dale Mosby) writes:

>  
>In one of the articles that I read today the poster seemed to  
>indicate that QSL cards should indicate "2X" as part of  
>the mode used. I have noted that on many of my DX cards they do  
>indicate "2X" along with the mode used. Most of the US cards don't  
>seem to do that, though some do have "confirming our two way QSO"  
>printed, or "2 way" instead of the heading "mode".  
>  
>I had never had anyone mention that I should be filling out cards  
>like this. I grabbed my ARRL operating manual tonight and took a  
>quick look at the section on QSLing and awards. I didn't see  
>mention that you should clearly indicate that this was a 2 way  
>contact. But it could be there as I didn't take time to study this  
>carefully -- though I did read it reasonably well when I first  
>started sending out cards. Seems that if someone has my card, with  
>my call sign prominently printed on it, their call sign, time,  
>frequency, etc printed on it it, that should be a pretty good  
>assumption that we spoke with each other.  
>  
Well... What if KB9XXX hears DX9XXX and sends the dx station a  
card with the two call signs?

>So what is the deal here? Is there really some awards issuing  
>organization that will not accept cards unless they clearly  
>indicate that I had a "two way" contact with someone?  
>

I have a friend who was a ham in Romania (KB9HAY now). To get the  
first level license he had to get 100 (not sure about the number -  
could be larger) SWL-QSL cards.

After that he had to again get a number of QSL cards for 2-way  
contact before he could upgrade. The ministry was very picky  
about requiring the cards to be explicitly labelled "2-Way"  
or "2x" or some such.



The highest level of license allowed you to put out 400W. There was however a catch. You had to build your own amp, demonstrate that you understood its working and that it met the law. It would be spot inspected at station by an inspector who would check the working of the amplifier. It had better not be capable of making more than 400W! (The limit). If it passed then that was the amp that you were allowed to use.

These are my recollections of a presentation that Relu, KB9HAY, made to our club a year ago. He left Romania in 1990.

Rajiv  
aa9ch  
Address: r-dewan@nwu.edu  
Phone: None. Only CW.

-----  
Date: Wed, 17 Mar 1993 09:59:40 GMT  
From: sdd.hp.com!zaphod.mps.ohio-state.edu!howland.reston.ans.net!gatech!wa4mei!  
ke4zv!gary@network.UCSD.EDU  
Subject: Washing Radios?  
To: info-hams@ucsd.edu

In article <9303162320.AA05421@batdd6.batdd1.pica.army.mil> klaudon@pica.army.mil writes:

>In the past there have been numerous postings from experienced restorers  
>which described washing the equipment with soap and water (dishwasher or  
>>manual). I have not yet had a chance to try this on a piece of electronic  
>gear, although I did do this recently with my wife's upright vacuum cleaner.  
>The unit was FULL of dirt in the motor housing, and under tap water it  
>released fistfuls of dirt, hair, fibers. I held it under running water for  
>a good 15 minutes until the water started coming out clear! No soap was used.  
>I let the unit dry for several days, then reassembled and did the smoke test.  
>It ran like a champ, didn't overheat as before, and gave good suction.  
>I felt great, gave kudos to those guys who turned me on to this idea, and  
>the XYL was off my back! Easy!

>

>I spoke too soon, however. Within 30 min to 1 hour of operation, the vac  
>started crapping out - would stop and act dead - like an open connection,  
>or a tripped overload device (don't know if the motor has one or not, just  
>speculation). After letting it sit for some undetermined period (the next  
>time vac was needed) it would run again for another period and repeat the  
>problem.

>

>I have not done ANY troubleshooting, so there is no positive evidence linking  
>this behavior to the washing. Perhaps the washing dissolved some glue on  
>some piece of insulation, or soaked and swelled a piece of paper insulation,

>or similar such damage so as to cause the motor to overheat, or trip.

Most likely you washed out all the motor bearing lubricant. If rusting hasn't started, you can relube the bearings and it should be fine. To prevent rust, it's important to use very hot water that will evaporate off quickly. Use of an oven on low will help accelerate the drying process. Use of \_Cascade\_ or other wetting agent will also help avoid rust and speed drying. Use of compressed air to dry the equipment is also encouraged.

Water *is* corrosive, and should be removed as quickly as possible. Water can also attack paper insulation materials, but these are usually varnished and can stand short exposures to water. High temperatures can also melt waxes that are sometimes used in older equipment to fix coil slugs in place. Freshly melted candle wax can be used as a replacement.

In normal practice, it's better to disassemble equipment as far as possible before cleaning. This allows you to segregate parts that need special handling from the bulk of the equipment that can be washed in ordinary fashion. Cold freon baths are the safest way to clean electronic components, but the Greenies frown on it. Carbon tetrachloride, alcohol, or hot soapy water are alternatives. You should expect all lubricant to be removed by any of these treatments. This is critical for motors, variable capacitors, and most importantly for pots. Dry pots are quickly ruined. You should immediately spray \_Quietrol\_ into any pot as soon as the solvent is removed.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: 17 Mar 93 12:21:41 GMT

From: usc!howland.reston.ans.net!newsserver.jvnc.net!netnews.upenn.edu!prijat!  
triangle.cs.uofs.edu!bill@network.UCSD.EDU

Subject: What about those FAQing number stations anyway?

To: info-hams@ucsd.edu

In article <1o4468INN6rh@fbi-news.Informatik.Uni-Dortmund.DE>,  
thewes@gamma.informatik.uni-dortmund.de (Berthold Thewes) writes:

|> >computer. "Zero" was used instead of "Null" (0) and a word like

|> >"Fuelle" was used instead of "Fuenf" (5). Transmissions were

|> ^^^^^^

|>

|> They say "Fuennef" (you see the similarity to "Fuenf"?). But I don't

|> know the reason why, perhaps they think this will make it clearer to  
|> understand.

Possibly for the same reason the American Military says "niner"  
instead of nine. I spent 15 years in the Army most of it in  
the Signal Corps. And I still don't know why!!

bill KB3YV

--

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Bill Gunshannon      | "There are no evil thoughts, Mr. Reardon" Francisco  
bill@cs.uofs.edu     | said softly, "except one; the refusal to think."  
                     | #include <std disclaimer.h>
```

-----  
Date: Wed, 17 Mar 1993 13:52:55 GMT  
From: usc!howland.reston.ans.net!spool.mu.edu!sgiblab!sgigate!odin!  
chuck.dallas.sgi.com!adams@network.UCSD.EDU  
Subject: Wrinkle Paint  
To: info-hams@ucsd.edu

Thanks to all who answered my previous post for information on  
black wrinkle paint. all were helpful but involved too much  
effort in locating exotic aircraft suppliers, etc.

so i scouted around the auto supply stores. looks like Krylon went  
out of the business of supplying wrinkle paint. i sure couldn't find  
it anywhere using SWBTS (funny, i hear the ad and see it aperiodically  
but can't remember the spelling - SWABITS, SWBYPS, ....)

but there is a happy ending to all this madness. i received a Brown  
Brothers Iambic Paddle from a CW friend of mine. its base was in pretty  
sad shape. i personally have a Vibroplex that is 35 years old and it  
looks like it just came off the assembly line. i have seen some equipment  
that was less than 5 years old, cost over \$800 and looks like the owner  
left it out in the rain with the cake (old song :-). why is that?

i went down to an auto supply store that i had called who had wrinkle paint.  
i bought one can of VHT Wrinkle Plus Coating, part number SP-201 Wrinkle  
Black (the only color you can get, just like the Model T, which i've never  
owned). costs \$3.99. doesn't require baking the in the oven and POing the  
rest of the family off real good. this paint required applying three separate  
coats applied at 3 minute intervals, then i let it set for 3 days. the  
Adams DFW rule applies here. the DFW rule is: don't fool with it!! or  
any other four letter word you wanna use. ;-)

after putting the Brown Bros paddle back together and setting it on the desk,  
i was amazed. it looks brand new. kinda makes me proud. the wrinkle is  
beautiful, shiny, and because this is engine paint, is tougher than nails.  
think i should send sample to Gary, KE4ZV, for destructive testing? :-)

now on to restoring one HW-16 that was left out in the rain.....

73 de k5fo chuck      dit            dit

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Date: 17 Mar 93 15:17:00 GMT  
From: swrinde!sdd.hp.com!zaphod.mps.ohio-state.edu!howland.reston.ans.net!  
noc.near.net!hri.com!ukma!netnews.louisville.edu!harpe@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1o3dqnINNgdf@meaddata.meaddata.com>,  
<1993Mar16.185802.6546@netnews.louisville.edu>, <114109@netnews.upenn.edu>  
Subject : Re: Dayton Hamvention Information

depolo@eniac.seas.upenn.edu (Jeff Depolo) writes:

>In article <1993Mar16.185802.6546@netnews.louisville.edu>  
harpe@netnews.louisville.edu (Mike Harpe) writes:  
>>I'm curious. Last year after Dayton it was widely reported that last year  
>>was the last year for Dayton at Hara Arena. Now i'm seeing that it's still  
>>there. What's the deal?

>I believe they signed a three-year renewel at Hara according to what I  
>remember hearing on Newsline last week.

Interesting. The reason I asked was that someone said that Hara was being  
leveled to build a subdivision or golf course....weird...any Dayton natives  
out there that know The Full Story....??

Mike

--

Michael Harpe, Programmer/Analyst	Information Technology, Ormsby Bldg.
harpe@hermes.louisville.edu	University of Louisville
(502)588-5542	Louisville, Ky. 40292

"He's not a man, he's a remorseless eating machine!" - The Simpsons

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Date: Wed, 17 Mar 1993 13:36:03 GMT  
From: sdd.hp.com!spool.mu.edu!sgiblab!sgigate!odin!chuck.dallas.sgi.com!  
adams@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1993Mar16.015844.25131@odin.corp.sgi.com>,  
<1993Mar16.160653.13026@ke4zv.uucp>, <1993Mar16.181301.8099@dsd.es.com>  
Subject : Re: A few QRP related questions.

In article <1993Mar16.181301.8099@dsd.es.com>, alan@bambam.es.com (Alan Brubaker) writes:

```
|> Actually, unless something has changed, the 30 meter band is still
|> "off limits" to Field Day operation. All other amateur bands and
|> modes may be used for valid FD QSOs. It is correct to say that
|> Field Day is technically not a contest since no awards are given,
|> and no winners are declared.
|> --
|> Alan Brubaker, K6X0      |~|_ "Pumps have handles, Hams have names;
|> <IYF disclaimer>       | * |mine's Lee, what's yours?" - Lee Wical,
|> Internet: alan@dsd.es.com|____|KH6BZF, the Bloomin' Zipper Flipper.
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I'm truly sorry that i opened this can of worms by using the word contest!  
My sincere apologies to the ARRL, all FD hams (and i do work FD), and any  
body else.

I looked up 'contest' in Webster's Ninth New Collegiate Dictionary.

contest 2: a competition in which each contestant performs without direct  
contact with or interference from his competitors.

obiously, field day violates both of these rules. ; -)

it still seems like a contest. we keep scores, we are ranked in the summary  
every year.....

73 and happy field day. we've already had snow, sleet, tornados, .... this  
year, maybe we can get lucky this year for field day. ; -)

chuck

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End of Info-Hams Digest V93 #334

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